Please type a plus sign (+) inside t
Under the Paperwork Reduction Ac

PTO/SB/05 (4/98)

Approved for use through 09/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

B-1479 Attomey Docket No.

First Inventor or Application Identifier AnnaLee Y. Tonkovich

Title reactor & method

EJ017935625US Express Mail Label No. Only for new nonprovisional applications under 37 C.F.R. § 1.53(b)

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application con	Assistant Commissioner for Patents ADDRESS TO: Box Patent Application Washington, DC 20231		
Y Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee procession)	5 Microfiche Computer Program (Angendix)		
2. X Specification [Total Pages (preferred arrangement set forth below)	(if applicable, all necessary)		
- Descriptive title of the Invention	<u> </u>		
- Cross References to Related Applications	b. Paper Copy (identical to computer copy)		
 Statement Regarding Fed sponsored R & D Reference to Microfiche Appendix 	c. Statement verifying identity of above copies		
- Reference to Micronicite Appendix - Background of the Invention	ACCOMPANYING APPLICATION PARTS		
- Brief Surnmary of the Invention			
- Brief Description of the Drawings (if filed)	7. Assignment Papers (cover sheet & document(s))		
- Detailed Description	8. 37 C.F.R.§3.73(b) Statement Power of (when there is an assignee) Attorney		
- Claim(s)	9. English Translation Document (if applicable)		
- Abstract of the Disclosure	Information Disclosure Copies of IDS		
3. X Drawing(s) (35 U.S.C. 113) [Total Sheets	4] Statement (IDS)/PTO-1449 L Citations		
4. Oath or Declaration [Total Pages]	Return Receipt Postcard (MPEP 503)		
a. Newly executed (original or copy)	12. X (Should be specifically itemized)		
b. Copy from a prior application (37 C.F	mpleted) Laly Chatamantal Statement med in prior applications,		
DELETION OF INVENTOR(S)	(PTO/SB/09-12) Status suit proper and desired		
Signed statement attached of inventor(s) named in the prior			
see 37 C.F.R. §§ 1.63(d)(2) ar			
NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAYS	MALL ENTITY		
FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1 IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.I	27), EXCEPT		
	te box, and supply the requisite information below and in a preliminary amendment:		
	ion-in-part (CIP) of prior application No:		
The state of the s	Group / Art Unit:		
	disclosure of the prior application, from which an oath or declaration is supplied accompanying continuation or divisional application and is hereby incorporated by		
reference. The incorporation can only be relied upon whe	n a portion has been inadvertently omitted from the submitted application parts.		
17. CORR	SPONDENCE ADDRESS		
	or X Correspondence address below		
Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here)			
Paul W. Zimmerman (K1- Battelle Memorial Insti			
Address P.O. Box 999			
city Richland	State WA Zip Code 99352		
	ephone (509) 375-2981 Fax (509) 375-4487		
Registration No. (Ammer/Agent) 2.0, 7.6.1			
100 miles 100			
Signature Saul Waymullulu. Date Splats of the individual case. Any			

comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

PTO/SB/17 (12-98)

Approved for use through 09/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 1999

Patent fees are subject to annual revision. Small Entity payments must be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12.

TOTAL AMOUNT OF PAYMENT

380.0

- Francisco Control Manual Control Control Manual Control Control Manual Control Contr				
Complete if Known				
Application Number				
Filing Date	·			
First Named Inventor	Annalee Y. Tonkovich, et al.			
Examiner Name				
Group / Art Unit				
Attorney Docket No.	B-1479			

METHOD OF PAYMENT (check one)	FEE CALCULATION (continued)		
The Commissioner is hereby authorized to charge indicated fees and credit any over payments to: Deposit Account 02-1275	3. ADDITIONAL FEES Large Entity Small Entity Fee Fee Fee Fee Fee Code (\$) Code (\$)	Fee Paid	
Number	105 130 205 65 Surcharge - late filing fee or oath	<u>.</u>	
Deposit Account Pacific Northwest Division Name	127 50 227 25 Surcharge - late provisional filing fee or cover sheet.	· ·	
Charge Any Additional	139 130 139 130 Non-English specification		
Fee Required Under 37 CFR 1.16 and 1.17	147 2,520 147 2,520 For filing a request for reexamination		
	112 920° 112 920° Requesting publication of SIR prior to Examiner action		
2. Payment Enclosed: Check Money Other Order	113 1,840° 113 1,840° Requesting publication of SIR after Examiner action		
	115 110 215 55 Extension for reply within first month		
FEE CALCULATION	116 380 216 190 Extension for repty within second month		
1. BASIC FILING FEE	117 870 217 435 Extension for reply within third month		
Large Entity Small Entity Fee Fee Fee Fee Description	118 1,360 218 680 Extension for reply within fourth month		
Code (\$) Code (\$) Fee Paid	128 1,850 228 925 Extension for reply within fifth month		
101 760 201 380 Utility filing fee 380	119 300 219 150 Notice of Appeal		
106 310 206 155 Design filing fee	120 300 220 150 Filing a brief in support of an appeal		
	121 260 221 130 Request for oral hearing		
	138 1,510 138 1,510 Petition to institute a public use proceeding		
	140 110 240 55 Petition to revive - unavoidable		
SUBTOTAL (1) (\$) 380.00	141 1,210 241 605 Petition to revive - unintentional		
2. EXTRA CLAIM FEES	142 1,210 242 605 Utility issue fee (or reissue)		
Fee from Extra Claims below Fee Paid	143 430 243 215 Design issue fee		
Total Claims 13 -20** = X	144 580 244 290 Plant issue fee		
Independent 2 - 3** = 0 X =	122 130 122 130 Petitions to the Commissioner		
Multiple Dependent	123 50 123 50 Petitions related to provisional applications		
**or number previously paid, if greater, For Reissues, see below	126 240 126 240 Submission of Information Disclosure Stmt		
Large Entity Small Entity Fee Fee Fee Fee Description Code (\$) Code (\$)	581 40 581 40 Recording each patent assignment per property (times number of properties)		
103 18 203 9 Claims in excess of 20	146 760 246 380 Filing a submission after final rejection		
102 78 202 39 Independent claims in excess of 3	(37 ČFR 1.129(a)) 149 760 249 380 For each additional invention to be		
104 260 204 130 Multiple dependent claim, if not paid		1 1	
109 78 209 39 ** Reissue Independent claims over original patent	Other fee (specify)		
110 18 210 9 ** Reissue claims in excess of 20 and over original patent	Other fee (specify)		
SUBTOTAL (2) (\$) -0-	Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) -(0-	
SUBMITTED BY Complete (if applicable)			

(SUBMITTED B	Υ		Complete (if	applicable)
Γ	Typed or Printed Name	Paul W. Zimmerman		Reg. Number	34,761
	Signature	Paul W- Simmeman	Date 37/A06/11	Deposit Account User ID	005055

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

EXPRESS MAIL MAILING LABEL #EJ017935625US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:			
AY Tonkovich Y Wang, SP Fitzgerald,) JL Marco, GL Roberts, DP Vanderwiel,) and RS Wegeng	Docket #: B-1479		
For: A CHEMICAL REACTOR AND METHOD) FOR GAS PHASE REACTANT) CATALYTIC REACTIONS	Date: August 17, 1999		

CERTIFICATE OF MAILING

Box PATENT APPLICATION Assistant Commissioner for Patents Washington, DC 20231

Dear Sir:

The undersigned hereby certifies that the attached:

[X] Patent Application of 13 pages
[X] 4 Sheets of Drawings
[X] Patent Transmittal Fee Sheet (2 ea.)
[] Assignment and Cover Sheet
[] Combined Declaration and Power of Attorney
[X] Small Entity
[] Information Disclosure Statement
 [] with attachments

are being deposited with the United States Postal Service as:

[] First Class Mail [X] Express Mail - Label <u>#EJ017935625US</u>

in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on the date set forth below.

Signature

Date Deposited

Janice K. Laybourn (K1-53)
Intellectual Property Services
Battelle Memorial Institute
Pacific Northwest Division
P.O. Box 999
Richland, WA 99352
(509) 375-2655